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Change in category membership from the perspective of construction grammar: a commentary

Graeme Trousdale

1. Introduction

This chapter provides a commentary on and discussion of the other contributions to this volume. It is concerned with establishing areas of common ground across the contributions, as well as identifying differences. In particular, the focus is on understanding the notion of a linguistic category, if one assumes that the fundamental building block of language is the construction. The present chapter explores this conceptualization of a category from the perspective of language change. This involves a discussion of how categories come into being and, once they are established, how they change. As is the case with the other contributions, the focus is on morphological, morphosyntactic and syntactic categories, and there is no discussion of phonological categories.

Many approaches to linguistic categorization tend to fall into two main camps. One perspective is to privilege form, such that item α is said to belong to category X because it displays certain morphological or syntactic properties. For example, English nouns typically inflect for number, and collocate with determiners. There are usually exceptions to the generalizations (e.g. invariant nouns like *sheep* whose singular and plural forms have the same morphological shape, proper nouns like *London* which are inherently definite and do not follow determiners), but the

generalizations hold true for the central cases. The second perspective is to privilege function, by suggesting that discourse participants have a particular communicative goal, and to achieve that goal, they make use of form *f*. For example, if speakers of English want to modify some referential item in the discourse, a particular set of structures may be drawn on. Assigning a category label to the modifier is straightforward in some cases (e.g. *exciting* is an adjective in *an exciting story*; *spy* is a noun in *a spy story*), less so in others (e.g. *Edinburgh* is presumably but peculiarly adjectival in *a very Edinburgh attitude*). Both approaches involve establishing category membership in terms of distribution; most variants of construction grammar that have been concerned with language change are broadly functionalist (see e.g. Croft, 2000, 2001; Hilpert, 2013; Petré, 2014; Traugott & Trousdale, 2013, and the contributions in Barðdal *et al.*, 2015).

This type of diachronic construction grammar has been largely concerned with non-phonological category membership, and therefore change in categories from the perspective of construction grammar has focused on:

- a. the establishment of a morphological, morphosyntactic or syntactic category (i.e. the creation of a new category);
- b. the restructuring of an existing category;
- c. the loss of a category.

There is little discussion of category loss in this volume, so the remainder of this commentary will be structured as follows. In section 2, I focus on the first two types of change above: the coming into being of a category (2.1.), and change to an existing category (2.2.). Section 3 is concerned with the issue of gradualness in change (see

further the contributions to Traugott & Trousdale, 2010). Section 4 focuses more on the architecture of the constructional network, and how this changes: in 4.1., the issue of inheritance and lateral links is discussed, in connection with categorical gradience; in 4.2., the relationship between constructional reorganization and constructionalization is considered. Section 5 concludes.

2. Categories: creation and change

2.1. The creation of a new category

Hieber's contribution to this volume deals explicitly with what he calls "category genesis". This kind of category change is particularly important because it relates to the complex issues of reanalysis and analogy in diachronic linguistics: in Hieber's words, "[i]f there are no pre-existing words in the class to analogize to, how does the category arise?". (Reanalysis and analogy are discussed in more detail in section 3 below.) One of the many insights in Hieber's contribution concerns the role of schematization in constructional change, and constructionalization in particular (see further section 4). In Traugott & Trousdale (2013), the discussion of the schematicity, productivity and compositionality of a construction undergoing change does not suggest that one of these properties of constructions is necessarily more important than either of the others, but Hieber's focus on schematicity is certainly warranted in those subtypes of constructionalizations which involve the creation of schemas (as opposed to cases involving the loss of schemas and isolation in the constructional

network, e.g. the latter history of the words *hatred* and *wedlock* in English as discussed by Traugott & Trousdale, 2013).

Hieber uses a term suggested by Marianne Mithun, namely ‘light paradigmaticity’ to describe the early history of the category of preverbs in Chitimacha. Hudson (1997), in his discussion of the development of periphrastic *do* in English, refers to the notion of category strengthening, and the creation of Chitimachan preverbs and English auxiliaries seems to share this property of a shift from lightly aligned elements of a paradigm becoming more clearly defined over time. In other words, the boundary between the new category and any other category of the language becomes sharper or strengthened as schematization increases. The heterogeneity of sources for Chitimachan preverbs is perhaps greater than that for English auxiliaries, though even here there is some degree of variability, especially in the case of more marginal members of the category, such as *be able to*, *be about to*, or modal *better*. Over time, the category is defined by increasingly uniform behaviour by members of diverse sources. This issue is also relevant to the distinction between inheritance and lateral links, as discussed in section 4 (see also Norde & Morris, this volume).

Hieber’s analysis is helpful for an understanding of the similarities across a diverse set of inputs to the new category. In particular, we see that these similarities extend across a range of formal and function levels (e.g. phonotactic properties, syntactic position and a shared directional semantics). While not all of these properties are shared by all of the precursors, most of them are, and the exceptional members are not exceptional for the same reason (e.g. *ka:p* is atypical because of the structure of its syllabic rhyme; *ni* is atypical because it does not participate in the reversative alternation that Hieber describes). By adopting a constructional approach,

one can identify the fine-grained way in which the precursors differ at varying constructional levels, as well as identifying their commonalities.

2.2. *Category restructuring*

Many papers in the volume consider the increase in membership of an established category, and in particular aspects of expansion in change (e.g. the contributions by Norde & Morris, Coussé and Fonteyn & Heyvaert). One such type of expansion is the capacity for an expression to extend its range of collocates, which is a kind of host-class expansion (Himmelmann, 2004). Some of the research in this volume explores the relationship between category change, expansion and the creation of constructional niches.

As Booij & Audring (this volume) show, certain Dutch adjectives may be coerced into nouns within the context of a prepositional phrase, but it is in fact a context involving a highly restricted set of prepositions (or sequence of prepositions), such as *tussen X*, or *van X tot Y*. This is consistent with other work on constructional change which foregrounds the idea of specific local contexts in the early stages of change, and context expansion in later stages (cf. Himmelmann, 2004; Traugott & Trousdale, 2013). Coussé (this volume) also addresses the nature of host-class expansion, linking it to the idea that host-class expansion is a diagnostic of “changes in the internal structure of a category as a whole”. This view of a category makes reference to Croft’s Radical Construction Grammar (Croft, 2001); Coussé sees the slot in a constructional schema as a kind of category. So for instance, a perfect construction consisting of two verbs, one more auxiliary-like, and another inflectionally marked for past tense consists of the more fixed auxiliary element, and

a more open slot of past participles. Her idea is that if certain auxiliaries initially combine with certain past participles (e.g. Dutch *zijn* with change-of-state/-location past participles, and *hebben* with change-of-possession past participles), then undergo changes in collocational restrictions (such the combination of *hebben* with verbs of less prototypical transitivity), there has been a change in the category defined by the construction. What links Booij & Audring's perspective on constructional morphology, and Coussé's perspective on auxiliary combinations in perfect constructions, is the idea that patterns may be associated with highly restrictive collocations at first (i.e. the slot with which the fixed element combines may have only a few members, or the fixed element may be one of many possible members of a set), and that change involves the weakening of these collocational bonds in some cases (e.g. the Dutch perfect) or continue in a particular niche in others (e.g. the coercion of A > N in certain Dutch PPs). This issue is brought even further into relief in Coussé's analysis of binominal quantifiers in Spanish (see further Verveckken, 2015). Here we see that within the schema, certain of the fixed quantifier elements allow for a wider semantic range in the slot than is the case with other quantifiers. Thus, when considering constructional change, for both the fixed element and the slot, we are often dealing with sets, and although membership of the former is typically more circumscribed than the latter, change in membership of the set may or may not happen in both cases.

An important factor in considering the role of constructions in the creation of new category members is coercion. As Booij & Audring (this volume) observe, the role of coercion in change is relevant for both syntactic and morphological constructions: for instance, adjectives can appear in slots typically associated with nouns (e.g. following determiners), while abstract nouns can be coerced in the plural

construction and receive an interpretation of ‘types of’, e.g. *Englishes* (cf. also the discussion of coercion in 2.4. of Battfeld, Leuschner & Rawoens (this volume)). It is clear that items so coerced do not lose all of the properties of their source category. Thus in English, certain adjectives used in N-slots (e.g. *the poor*) can be modified by degree adverbs (*the very poor*) and inflect for grade (*the poorer, the poorest*). By contrast, in the Dutch example [*op het [A-e]_N af*]_{PP} discussed by Booij & Audring, the adjectives are overtly marked by a nominal suffix in this evaluative construction e.g. *op het triviale af* ‘almost trivial’. Similarly, the use of certain items as affixoids (discussed in more detail in 4. below in connection with the contribution by Norde & Morris) can lead to a change in their category membership. Two important issues fall out from this. One is that coercion may or may not involve the loss of all properties associated with the source category; the other is that coercion may involve inflectional constructions, and in turn, that inflectional constructions may facilitate category change, a significant issue given the typically class-preserving nature of inflections generally. The idea that a shift of a construction from derivation to inflection also constitutes category change is explored by Koutsoukos (this volume), and discussed in 3.

One of the issues that is raised by the contribution by Booij & Audring is the idea of mixed category membership: if an adjective can be coerced into a position where it is the complement of a preposition, is that item now a noun, or still an adjective, or some sort of hybrid? This issue of categorical hybridity is noted by Denison (this volume), who observes that mixed category status can help explain differences between internal and external distribution (e.g. for his case study of *long*, the fact that the word has internal properties, such as inflection marking, that align it with the category of adjective, but external distributional properties that align it with

the category of noun). In the case of English syntax, mixed status has been discussed most frequently in connection with gerunds, the topic of Fonteyn & Heyvaert's contribution to this volume. They distinguish nominal and verbal gerunds in terms of their respective internal syntax, and a key issue is the relationship between the formal properties of gerunds and their function. While the relationship between form and meaning is important for all linguistic theories, it is this precise relationship that is at the heart of construction grammar, i.e. the critical issue is the symbolic link between form and function. This is relevant for coercion (as discussed above), in that coercion involves the adoption of new formal properties by an item serving a function not previously associated with or typical of that item, i.e. where there previously was no symbolic relation. But the coercion phenomenon is one of many possible types of change, and the story of the gerunds proposed by Fonteyn & Heyvaert is one of an internal category split: the verbal gerunds are said to have developed as a distinct subtype, and the distinction lies in their discourse function.

In essence, Fonteyn & Heyvaert see the development of the distinct discourse properties of the nominal and verbal gerunds as a kind of 'niche formation' (cf. the discussion of the contributions by Booij & Audring, and Coussé above): while early (i.e. Middle English) gerunds were truly hybrid, the split means that each of the subtypes has its own functional niche. This niche is identified using Langackerian concepts of deixis, for example, nominal expressions take as their deictic focus (in terms of ground) the identification of referents. However, it is also clear from Fonteyn & Heyvaert's analysis that the creation of the verbal gerunds does not mean an absolute break from the nominal types from which they emerged. In other words (in a way parallel to some of the ideas put forward by Coussé (this volume)) there has been a degree of inter-categorial shifting, with verbal gerunds adopting the deictic

functions associated with clause-like elements, but not abandoning entirely some of the properties associated with nominal gerunds: there appears to have been some sharpening-up of the distinctions between the two subtypes, without a full break. Importantly, this sharpening-up is not just a feature of the new subtype. It is perhaps a natural tendency, when considering the creation of a new subtype within a category, to focus attention on what is happening with the newly created set. Yet Fonteyn & Heyvaert's analysis shows that much of the sharpening of distinctions is down to the changing profile of the nominal gerunds. The authors observe that bare nominal gerunds typically "profile non-controlled generic events (Fonteyn, Heyvaert & Maekelberghe, 2015)". Thus while the new verbal gerunds fill a particular deictic niche in the system, the older bare nominal gerunds similarly are aligned with a particular discourse function. This is not absolute, but a statistical tendency, and is a gradual process. The issue of gradualness in change is the topic of the next section.

3. Gradualness

Whether we are talking about establishment, reorganization or loss, typically changes affecting categories are stepwise, and while each individual step may be considered abrupt, the ways in which constructions as a whole are affected is gradual and cumulative. This is because of the componential properties of constructions; the internal dimensions of the constructions might not always be affected in the same ways at the same time. This notion of stepwise changes is central to the argument proposed by Denison (this volume), in his treatment of the development of English *long*.

An important part of Denison's argument are the notions of underdetermination (on the part of the linguist) and underspecification (on the part of the speaker/writer). This is a crucial area for our understanding of category change, because it relates to a key area of linguistic theorizing. Denison (this volume) writes:

Word classes are theoretical constructs devised to capture syntactic and other analogies. It is no more than a convenient fiction to assume that speakers and hearers operate with precisely those analogies and no others.

Since Denison's main focus in his article is the behaviour of the English word *long*, he is concerned primarily with lexical categorization. It is possible to take an even stronger position than the one articulated by Denison (this volume). The stronger position is that while certain distributional properties might encourage us to assign a particular item into a particular category, there are some occasions where such a categorization is either impossible, unnecessary, or both. This is especially true in cases where distribution is based on formal properties of the item in question; the matter is less acute if one takes a (radical) construction grammar approach in foregrounding the functional properties of the construction in which the item appears (cf. Croft, 2001; 2007). For instance, for language users who permit expressions like *that's so genius* and *he is a genius*, the word class of *genius* (i.e. as a noun or an adjective) in the expression *a genius answer* can only be stipulated arbitrarily. It is this very underdetermination that allows for the kind of step-wise shifts that Denison has observed both in this chapter and in other publications (e.g. Denison, 2010; 2013), and it is the relationship between underdetermination and step-wise changes that goes to the heart of the observed gradualness of language change.

Denison shows that from the Old English (OE) period onwards, the appearance of *long* in a range of constructional types may involve underdetermination (e.g. in the case of the adjunct adverbial use, with a universal quantifier, or as complement of a preposition) or may not (e.g. adjectival *long* in predicative constructions). It is in contexts of underdetermination in which we can track most clearly the development of the expression *take long*. I focus here on the form of three particular constructions identified by Denison, abbreviated as follows:

- (1) *It BE long* + clause
- (2) NP BE *long* (+ PP ~ AdvP)
- (3) NP V *long* (+ XP)

In (1), *long* is underdetermined as adjective or adverb, but other elements of the construction are fixed, i.e. the verb is copular, and the subject non-referential. It has a specific meaning (an act which takes a long time), but as Denison observes, there is a contextual implication that the time taken is not simply long, but excessively or wearily so. The shift to (2) involves expansions of various kinds (cf. 2.2. above), both in terms of the subject (where personal subjects are now licensed) and complement (which needs no longer be clausal). The licensing of personal subjects involves a semantic step-wise shift too (involving topicalization). The shift from (2) to (3) involves further expansions (e.g. from BE as the only element that occupies the V slot, to a range of other verbs such as *last* and *take*). The consequence of this is whether *long* should be considered an adjunct or as a complement; if the latter, the nominal status of *long* is increased.

Essentially then, the development of *take long* as a micro-construction involves expansions of various kinds. Although *take long* is idiosyncratic, it is part of a development which at various stages involved constructions opening up slots, and at each step, facilitated analogies with other kinds of constructions (e.g. ‘easy-to-please’ and light verb constructions). What we have is the intersection of a range of changes which results in this particular pattern. A similar issue is raised by Battefeld, Leuschner & Rawoens in their discussion of evaluative constructions in Germanic languages. Like Denison, they underscore the fact that lexical category status is not always clear-cut, and that this is brought into relief in cases of change, when new members of category may only display a subset of the properties that prototypical category members display. The study of affixoids is particularly interesting in this regard, because they illustrate two issues regarding category status: one concerns membership of lexical categories (how adjectival are predicative uses of German *hammer* ‘great’, for example?), and the other concerns the categorical status of affixoids as a set in the linguistic system. Here then we have both category restructuring (cf. 2.2.) and category genesis (cf. 2.1.).

The same might be said of the development of Chitimachan preverbs (Hieber this volume), but here, as noted in 2.1., the change involves the development of a new category in the language, rather than the changes affecting a single item. Crucially, in both cases, the issues of reanalysis and analogy as mechanisms of change arise. Denison’s account shows the importance of analogy – or rather, analogical thinking – for each constructional change, but the changes themselves are new analyses of particular sequences. Similarly, in Hieber’s data, what we see is the primacy of neoanalysis that is facilitated by analogical thinking (analogization in Traugott &

Trousdale, 2013) in the creation of a new set of connections in the constructional network. Hieber writes:

Put another way, the schemas involved in classic analogization are abstractions over constructions that are already part of a tightly connected constructional network. The schemas that arise in the process of category genesis, however, link together nodes in the constructional network that were previously only weakly connected.

In the case of English *long*, existing constructions (like the ‘easy-to-please’ and light verb constructions mentioned above) display properties that serve as analogical attractors; in the case of Chitimachan preverbs, no such attractors exist; instead, the new category emerges because of similarities across members of the category. This is a crucial distinction: in standard analogy, new items come into being because aspects of form or function are matched on to patterns associated with pre-existing schemas; in category genesis, patterns shared across individual micro-constructions are neoanalysed as being diagnostics of a new general schematic category. In both cases, however, the establishment of the constructions are gradual.

A further aspect of gradualness in change is the spread of the change across members of a social network or speech community. Variation in individual speaker behaviour may be a reflection of differing degrees of entrenchment of a particular pattern in idiolects. This is an issue touched on by Battfeld, Leuschner & Rawoens (this volume), and while it is a fairly standard observation in historical linguistics, it is of particular relevance in their analysis of the Germanic evaluative constructions because of the connection that is made with constructional networks. In the same way

as individual speakers do not share precisely the same knowledge of every individual lexical item, so they may not share the same morphological schemas, so constructional networks can vary in terms of the degree of entrenchment of particular nodes. The next section considers the shape of constructional networks more closely.

4. The constructional network

4.1. Links between constructions

In (diachronic) construction grammar, some central questions concern the relationship between a particular construction and its neighbours (i.e. pairings of form and meaning which display similar behaviour) and the relationship between micro-constructional changes and restructuring of schemas. Hilpert (2015) has shown quantitatively that micro-constructions can develop in particular directions and with variable degrees of adherence to the properties that come to define the more general category. Thus the associations between constructions at the same level of generality, as well as the inheritance relationship between more general schemas and more specific micro-constructions are subject to change, and affect the overall shape of the category.

Certain contributions in this volume raise general questions about the nature of the relationship between constructions. Goldberg (1995) discusses the Principle of No Synonymy, i.e. a situation in which forms that are semantically equivalent are not pragmatically equivalent, and vice versa. Typically this is explored in terms of syntactic patterns, but the Griko data discussed by Koutsoukos (this volume) show

that it is relevant too in construction morphology. The Griko morphological construction explored in that research allows for the creation of doublets of the kind *lypo* ~ *lypidzo* both meaning ‘to mourn’ or ‘to feel sad’. Koutsoukos notes that such doublets “differ only with respect to their formal make-up, that is, the appearance of the formative *-idz(o)*. There is no semantic opposition or aspectual difference between the two forms”, and suggests that the motivation for the creation of the *-idz(o)* verbalizer is analogical thinking based on variability in the morphological analysis of two different inflectional classes of verb in terms of their formal properties in the present and aorist tenses. Koutsoukos gives the formal representation of this morphological construction as follows (cf. his example (10) in this volume):

$$(4) \quad [[X]_{m\text{-verb-ic}2+idz(o)}]_{k\text{-verb-ic}1} \leftrightarrow [SEM_{V_m}]_k$$

The construction in (4) has a more grammatical function than the other constructions involving *-idz(o)* in Griko (i.e. those in which *-idz(o)* serves to derive verbs from nouns and adjectives, e.g. *alatidzo* ‘to salt’ < *alati* ‘salt’). The co-option of this previously derivational pattern as a grammatical construction suggests that Griko speakers are restructuring part of their system of inflectional classes.

This restructuring highlights the issue of the inheritance in the constructional network and features in a number of contributions to the volume. There has been a considerable amount of work recently on inheritance as a diachronic phenomenon (cf. the ‘synchronic’ conceptualization of inheritance in e.g. Goldberg, 1995), much of it from the perspective of multiple sources for new constructional types. But this ‘vertical’ inheritance is complemented by ‘horizontal’ or lateral links, for instance, between a prototypical member of a category and an extension from that prototype.

The distinction between inheritance and lateral links is central to the analysis proposed by Norde & Morris (this volume) in their discussion of Dutch diminutive prefixoids. They recognize that individual micro-constructive types may involve inheritance from a range of more general schemas. A particularly interesting observation is that when functioning as prefixoids, the diminutives do not have a nominalizing function, but they do show the same kind of morphophonological properties that characterize the diminutives in their other functions in Dutch. Thus the inheritance from the diminutive schema is partial: not all properties of the more general schema are inherited. Multiple inheritance therefore implies more than one source, but does not imply that all of the properties of the inputs are inherited. However, the main focus of their contribution is on how lateral links in the network are relevant for an understanding of categories and changes (cf. the discussion of hybridity and mixed category membership in 2.2. above).

Drawing on Norde (2014), Norde & Morris (this volume) distinguish between interparadigmatic and intraparadigmatic links. The former involves a set of micro-constructions that share the same affix (and may also have bases which have some semantic association). The latter involves a set of lexical constructions which “share the same lexical base, but inherit from different subschemas”, such as the link between nouns ending in *-ism* and *-ist*, as in *fascism*, *communism* and *fascist*, *communist*. It is clear that constructions at the same level of generality may be associated with one another: for example, agent and instrument English nouns ending in *-er* (e.g. *teacher*, *trainer* vs. *cooker*, *boiler*) are sanctioned by schemas which are distinct, which inherit from a more general noun construction, but which are also associated laterally. More contentious, however, is the claim that interparadigmatically linked constructions “are not merely connected because they

inherit from the same (sub)schemas, they would have been linked *even in the absence of such a subschema*” (Norde & Morris, this volume; emphasis added). This supposes that a sequence of micro-constructions can be laterally linked without any overarching schema (cf. the discussion of schemata in 2.4. of Battefeld, Leuschner & Rawoens (this volume) as ‘theoretical abstractions’ in some cases). An alternative position is that the very act of association suggests that speakers have identified something that is common to all associated items, and at least one other thing that is variable (e.g. *social-* is common to both *socialism* and *socialist*; conversely, *-ist* is common to both *racist* and *socialist*). The product of this act of association may give rise to a new category: this appears to be very like the type of schematization that Hieber (this volume) proposes for the Chitimachan preverbs: what begins as a kind of light paradigmaticity develops into a more sharply distinguished category (see further the discussion in 2.1. above).

Consider further the paradigmatic relationship between *-ism* and *-ist* constructions that Booij (2013) describes, which is referred to by Norde & Morris (this volume). This is represented as follows:

$$(5) \quad \langle [a-ism]_{Ni} \Leftrightarrow [SEM]_i \rangle \approx \langle [a-ist]_{Nj} \Leftrightarrow [person\ involved\ in\ SEM]_j \rangle$$

(Booij 2013: 264)

In this representation the angled brackets represent the extent of each schema. I suggest that the paradigmatic link exists between schemas (not between micro-constructions), and that schematization is what allows for the establishment of paradigmatic links. This is critical for change. Booij (2010, p. 33) writes:

Even though semantically the word in *-ism* is the starting point for the word in *-ist*, this does not mean that the actual order of derivation necessarily reflect [sic] this semantic asymmetry. For instance, the word *abolitionist* may have been coined before *abolitionism*. Paradigmatic relationships [...] allow for word formation in both directions.

It is therefore important to recognize that the paradigmatic links are said to exist between constructions (not between parts of constructions). Now, it may be the case that weakly entrenched schemas over inter- or intraparadigmatically linked micro-constructions could be termed ‘patterns of coining’ (Kay, 2013; see also Norde & Morris, this volume). As Kay (2013) observes, the distinction might be more aligned to the more general perspective on language change that one adopts. A generative approach is more likely to see a sharp distinction between a pattern of coining and a schema, while a usage-based approach “which sees grammar as essentially, heterogeneous, redundant, statistical, and in a state of flux” (Kay, 2013, p. 46) will see the distinction as more blurred. From a usage-based perspective, the ‘upgrading’ of a pattern of coining to a schema may be related to the notion of entrenchment, and also to gradience in category membership. The entrenchment factor is relevant in the discussion of the Germanic evaluatives by Battefeld, Leuschner & Rawoens (this volume), who recognize that “networks correspond to the abstractions made by individual language users on the basis of their linguistic knowledge”, while the issue of gradience is a feature of the contribution by Van Goethem, Vanderbauwhede & De Smet.

In Van Goethem, Vanderbauwhede & De Smet (this volume), we see how gradience is relevant to the heterogeneous category of degree adverbs, particularly

downtoners. The heterogeneity is true of both the extent to which members share properties, but also the source for many of these downtoners (e.g. in English, adjectives (*pretty*), binominal constructions (*a bit*) and sequences of adjective and preposition, in the case of *far from*). In their study, we see a clear example of the creation of constructional niches (cf. 2.2. above), with *ver van* more frequently used to mark spatial or metaphorical distance, and *verre van* used as a downtoner. These uses are probabilistic, not absolute; and these niches are not simply a matter of function, because – as is consistent with the principles of construction grammar – there is an intimate relationship between the functional niche established by a construction, and certain formal properties (both internal, for example in terms of the phonological properties of the sequence, and external, for example in terms of the dependency relationships and complementation patterns that can be observed). In the case of *ver van* and *verre van*, Van Goethem, Vanderbauwhede & De Smet observe that the former typically collocates with nominal elements, the latter with adjectival ones. From a diachronic perspective, what Van Goethem, Vanderbauwhede & De Smet report is a situation where the two Dutch constructions come to diverge more substantially from the mid-nineteenth century onwards. They recognize that there is a period of ‘coexistence’ in which the two constructions both serve to express spatial distance, metaphorical distance and downtoning on a scale, but that a set of formal changes correlates with the specialization that occurs in the late Modern Dutch period. The downtoner function is an innovation for both constructions, but not one which comes to characterize *ver van*: it is *verre van* that fills this particular niche. This relates to the distinction between constructionalization and constructional changes, which is the topic of the next subsection.

4.2. Constructionalization, constructional changes and categories

In their analysis of the historical development of *ver van* and *verre van*, Van Goethem, Vanderbauwhede & De Smet suggest that while there are some formal and functional changes affecting *ver van* in its history, there is no constructionalization in this case, i.e. no conventional symbolic unit that is both form_{new} and $\text{meaning}_{\text{new}}$ (in the characterization by Traugott & Trousdale, 2013). While Van Goethem, Vanderbauwhede & De Smet notice that there is a specialization in meaning, and a favouring of particular complement types, the key issue in the case of *ver van* is that *ver* remains an adjective and *van* a preposition, i.e. the formal pole of the construction can be represented as in (6):

$$(6) \quad [[\text{ver}]_A [[\text{van}]_P [\text{XP}]]_{PP}]_{AP}.$$

In other words, there is no new analysis of that sequence in the development of this particular micro-construction. By contrast *verre van* begins with the form in (7a), and now has the form in (7b). (I recognize that Van Goethem, Vanderbauwhede & De Smet collapse *ver van* and *verre van* in the earlier history of Dutch: I separate these out here for the purpose of exposition only.)

$$(7) \quad \begin{array}{ll} \text{a.} & [[\text{verre}]_A [[\text{van}]_P [\text{XP}]]_{PP}]_{AP} \\ \text{b.} & [[\text{verre van}]_{Adv} [A]]_{AP} \end{array}$$

Notice that this neoanalysis is a rebracketing involving head-shift: in the earlier stage *verre* is the head of the whole string, while the adjective is the head of the new construction.

The analysis that Van Goethem, Vanderbauwhede & De Smet provide illustrates very neatly how specialization may or may not involve constructionalization. Compare in this regard the findings of Coleman & De Clerck (2011) on the English double object construction in the late modern English period: here we see a specialization in terms of constructional semantics (i.e. a kind of constructional change), but no constructionalization. The same holds true for *ver van* (though some of the formal complementation patterns suggest a formal specialization too, such that the constructional changes in this case are not restricted to semantics). By contrast, the *verre van* case is one in which there is a form_{new}-meaning_{new} pairing that is the product of neoanalysis, and that, as Van Goethem, Vanderbauwhede & De Smet show, also involves changes in the parameters of schematicity, compositionality and productivity. As Hieber (this volume) notes, however, not all members of a category need display precisely the same degree of change in these parameters. In the case of the Chitmachan preverbs, combinations involving the two most frequent preverbs (*hi* and *kap*) show different degrees of loss of compositionality.

The discussion of the development in the English gerund by Fonteyn & Heyvaert also raises some interesting questions in the relationship between constructionalization and constructional changes, in particular in regard to the nature of neoanalysis in both the form and meaning poles of a construction. There appears to be a kind of formal realignment in certain dimensions of the gerund in English. Fonteyn & Heyvaert (this volume) note that at the form level, the “neoanalysis of determinerless nominal gerunds to clausal structures affects *all* bare NGs, regardless

of their referential features” (emphasis original) but that “in those contexts where the referential behavior of the gerund is structurally ambiguous or experiences form-function friction, the formal verbalization of the gerund is facilitated”. In other words, specific contexts may influence the rate at which particular expressions come to be recategorized. Their account of the changes affecting the English gerund foregrounds the idea that one product of constructionalization may involve the sharpening of the alignment between form and function, and an increase in the distinctiveness of various micro-constructions within a particular schema, where particular patterns of language use serve to entrench the symbolic relation between a particular formal organization and a set of functions, both in terms of discourse and semantics.

Fonteyn & Heyvaert suggest that the changes affecting the gerund do not, however, fit squarely with Traugott & Trousdale’s model of constructionalization for two reasons. First, they suggest there is no clear sense in which there has been either a grammatical or a lexical constructionalization; second, they suggest their corpus data does not show changes in schematicity, productivity or compositionality, which Traugott & Trousdale (2013) link to constructionalization. Each of these issues is addressed in turn below.

First, it is necessary to distinguish between changes once a new (sub)category has been created, and the creation of that new category itself, as noted in §2 above. The analysis provided by Fonteyn & Heyvaert is concerned with how the nominal and verbal gerunds came to diverge in the period since Middle English. What Fonteyn & Heyvaert have shown is a fine example of how category strengthening (in the sense of Hudson 1997) is actualized in the development of the English verbal gerund. As the verbal gerund became more and more aligned with clausal deixis, it subsequently underwent further formal changes that aligned the new structure with patterns

typically associated with verbs (e.g. taking NP complements). Such changes are post-constructionalization constructional changes in the sense of Traugott & Trousdale (2013), and the focus in Fonteyn & Heyvaert (this volume) appears to be primarily on constructional changes affecting the meaning pole of the construction (especially in terms of deixis). In this regard, what appears to be primary is not so much what is gained by the verbal gerunds, but what is lost over time by the nominal ones.

The second issue concerns change in the dimensions of schematicity, productivity and compositionality referred to earlier in this subsection. For reasons of space, not all of the issues that Fonteyn & Heyvaert raise are dealt with here; instead, the focus is on their argument regarding compositionality. It could be argued that what Fonteyn & Heyvaert refer to as the ‘clausal verbal gerund construction’ has in fact become less compositional. Fonteyn & Heyvaert (this volume) write:

while it could be argued that the clausal verbal gerund’s compositionality has decreased because the $[\emptyset_{\text{DET}} + \text{V-ing}_N]_{\text{NP}}$ schema can no longer account for all deictic kinds of the verbal gerund, it seems far-fetched to consider the zero-determiner as a ‘constituent’ part of the construction since it has no physical presence.

Given the critical nature of bare or ‘determinerless’ variants of the gerund construction for the developments they describe in their article, I think it is crucial to recognize the zero determiner as a constituent part of the schema. As Traugott (1996, p. 304) observed, “zero does not mean nothing”. I assume by ‘lack of physical presence’ what is meant is that the determiner has no phonetic realization; but that

absence of a phonetic realization (in conjunction and contrast with other determiners where there is a phonetic realization) may be meaningful in itself.

The relationship between constructionalization and constructional changes is also taken up by Hieber. In particular, he focuses on the pre-constructionalization constructional changes that occurred which allowed speakers of Chitimacha to perceive a similarity across different inputs such that a category of preverb can be posited. Traugott & Trousdale (2013) foreground functional changes (e.g. pragmatic expansion, conventionalization of meaning) that characterize the pre-constructionalization change. Hieber's analysis builds on this, first by illustrating how metaphoric meanings of particular items in a particular context (e.g. the development of a 'wander' polysemy from the reditive venitive sense of *ʔapš*) come to be conventionalized, but then by showing how directional meaning came to characterize an aspect of the meaning of all of the members of the Chitimachan preverb set. Constructionalization in Hieber's view is discernible in the establishment of a particular kind of new form: in particular, it appears that the fixing of position is a key formal diagnostic, not simply in terms of their appearance in the preverbal slot, but more importantly in their boundedness to the verb.

One final issue to be discussed is whether every category change should be considered an example of constructionalization. Van Goethem, Vanderbauwhede & De Smet (this volume) suggest not, while acknowledging that some cases of category (e.g. their discussion of *verre van*) are grammatical constructionalizations, because they involve new procedural meaning, and a series of formal changes. Other cases, such as morphological conversions, are instantaneous and count as examples of lexical constructionalization. It is clear that once coined, a new lexical construction can fill the slot in a schema, and extend the boundaries of that schema incrementally.

Consider, in this regard, the appearance of the relatively newly coined noun *Brexit* in a range of different morphological and syntactic constructional schemas:

- (8) Before I do, and mindful of the fact that you may **be so Brexit'ed out** that you are not interested in any more views or observations, I shall say thank you for the kind comments received throughout the last month, both directly through this site, through Facebook, via email and direct voice.

[<https://bloodycaravan.wordpress.com/>; June 26th 2016]

- (9) I think Winterfell should **go all Brexit on** King's Landing.

[<https://twitter.com/davidlaz/status/747164168327835648>; 26th June 2016]

- (10) Given the hammering the UK financial markets have taken in the last two days, it may dawn on the Brexit voters as their economy declines and Scotland separates from the UK that they have made a foolish mistake and decide to **unBrexit**. (www.rferl.org/content/podcast-countdown-to-warsaw/27832696.html; July 7th 2016)

These examples demonstrate not only the flexibility of conversion in English, even of very recently coined items; they also show how change in both morphological and syntactic constructions can relate to underspecification in the variable element of the schema. For instance in *go all X on* NP, X may be an adjective associated with an emotional state (*crazy, angry*), or a noun whose referent typifies that emotional state

(e.g. *go all Hulk on NP_i* ‘become very angry with SEM_i’). The playful extension in (9) may be a blend between this construction and the more sedate *go X_i* ‘vote for SEM_i’ (e.g. *London went Labour at the last election*), but other examples (e.g. *go all professor/Australia/Sheldon Cooper on NP*) suggest that the construction may be undergoing a semantic broadening, such that the noun referent need not typify a particular emotion, but simply display a quality that is pragmatically relevant, and the meaning of the construction is ‘behave in a way that is stereotypical or characteristic of SEM_i’)

5. Concluding comments

The research presented in this volume demonstrates how constructional approaches to language change can account for the particular issues of category genesis and reorganization. The commentary above has provided a discussion of some of the similarities across the different contributions. In particular, the focus has been on:

- a. the difference between a category coming into being, and an existing category undergoing change;
- b. the extent to which both genesis and reorganization are gradual processes;
- c. the ways in which genesis and reorganization can be understood in terms of constructional networks, and indeed what such change tells us about constructional networks.

The constructional approach to language change is still a relative newcomer in the field of historical linguistics, and many issues remain to be resolved and discovered. In particular, the following issues might well serve as possibilities for future research in this area, based on the material presented in this volume:

- a. whether lateral links between micro-constructions must also involve inheritance links with a more general schema (Norde & Morris; Battefeld, Leuschner & Rawoens);
- b. whether category change by coercion is a kind of constructionalization (Booij & Audring; Van Goethem, Vanderbauwhede & De Smet);
- c. underspecification leading to category strengthening in both genesis and reorganization of categories (Denison; Hieber);
- d. hybridity and multiple sources (Booij & Audring; Fonteyn & Heyvaert; Denison; Hieber);
- e. niche formation and relaxation of constraints on niches (Coussé; Fonteyn & Heyvaert; Van Goethem, Vanderbauwhede & De Smet);
- f. change in morphological constructions, including ways in which these changes are similar to and different from syntactic changes (Koutsoukos; Battefeld, Leuschner & Rawoens; Hieber; Booij & Audring; Norde & Morris).

References

Barðdal, J., Smirnova, E., Sommerer, L., & Gildea, S. (Eds.). (2015). *Diachronic construction grammar*. Amsterdam: John Benjamins.

- Booij, G. (2010). *Construction morphology*. Oxford: Oxford University Press.
- Booij, G. (2013). Morphology in construction grammar. In T. Hoffmann, & G. Trousdale (Eds.), *The Oxford handbook of construction grammar* (pp. 255-273). New York: Oxford University Press.
- Colleman, T. & De Clerck, B. (2011). Constructional semantics on the move: on semantic specialization in the English double object construction. *Cognitive Linguistics*, 21(1), 183-209.
- Croft, W. (2000). *Explaining language change: An evolutionary approach*. London: Longman.
- Croft, W. (2001). *Radical construction grammar: Syntactic variation in typological perspective*. Oxford: Oxford University Press.
- Croft, W. (2007). Beyond Aristotle and gradience: a reply to Aarts. *Studies in Language*, 31(2), 409-430.
- Denison, D. (2010). Category change in English with and without structural change. In E. C. Traugott, & G. Trousdale. (Eds.), (2010). *Gradience, Gradualness and Grammaticalization* (pp. 105-128). Amsterdam: John Benjamins.
- Denison, D. (2013). Parts of speech: solid citizens or slippery customers? *Journal of the British Academy*, 1, 151-85.
- Fonteyn, L., Heyvaert, L., & Maekelberghe, C. (2015). How do gerunds conceptualize events? A diachronic study. *Cognitive Linguistics*, 26(4), 583-612.
- Goldberg, A.E. (1995). *Constructions: A construction grammar approach to argument structure*. Chicago: University of Chicago Press.
- Hilpert, M. (2013). *Constructional change in English: developments in allomorphy, word-formation and syntax*. Cambridge: Cambridge University Press.

- Hilpert, M. (2015). From hand-carved to computer-based: Noun-participle compounding and the upward-strengthening hypothesis. *Cognitive Linguistics*, 26(1), 1-36.
- Himmelmann, N. (2004). Lexicalization and grammaticization: opposite or orthogonal? In W. Bisang, N. P. Himmelmann, & B. Wiemer (Eds.), *What makes grammaticalization? A look from its components and its fringes* (pp. 21-42). Berlin: Mouton De Gruyter.
- Hudson, R.A. (1997). The rise of auxiliary *do*: verb-non-raising or category strengthening? *Transactions of the Philological Society*, 95, 41-72.
- Kay, P. (2013). The limits of (construction) grammar. In T. Hoffmann, & G. Trousdale (Eds.), *The Oxford handbook of construction grammar* (pp. 32-48). New York: Oxford University Press.
- Norde, M. (2014). On parents and peers in constructional networks. Paper presented at Cogling Days, Universiteit Gent.
https://www.academia.edu/9873697/On_parents_and_peers_in_constructional_networks
- Petré, P. (2014). *Constructions and environments: copular, passive and related constructions in Old and Middle English*. New York: Oxford University Press.
- Traugott, E.C. (1996). Review of W. Pagliuca, (Ed.) *Perspectives on Grammaticalization*. *Cognitive Linguistics*, 7(3), 301-306.
- Traugott, E.C. & Trousdale, G. (Eds.). (2010). *Gradience, gradualness and grammaticalization*. Amsterdam: John Benjamins.
- Traugott, E.C. & Trousdale, G. (2013). *Constructionalization and constructional changes*. Oxford: Oxford University Press.

Verveckken, K. (2015). *Binominal quantifiers in Spanish: Conceptually-driven analogy in diachrony and synchrony*. Berlin: De Gruyter.